



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 19ATEX2201X** Issue: **0**

4 Equipment: **POLI multiple-gas detector, models MP400/MP400P/MP400S/MP400H**

5 Applicant: **mPower Electronics (Shanghai) Co., Ltd**

6 Address: Building 2 66 Chunzhong Road  
Minhang District  
Shanghai 201108  
China

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:


EN IEC 60079-0:2018                      EN 60079-1:2014                      EN 60079-11:2012


The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:

 II 1G  
Ex ia IIC T4 Ga or  
Ex ia da IIC T4 Ga  
Ta = -20°C to 50°C

 II 2G  
Ex ia db IIC T4 Gb or  
Ex ia da db IIC T4 Gb  
Ta = -20°C to 50°C

Project Number 70207553

  
N Jones  
Certification Manager

This certificate and its schedules may only be reproduced in its entirety and without change.



**Sira Certification Service**

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**SCHEDULE**

**EU-TYPE EXAMINATION CERTIFICATE**

**Sira 19ATEX2201X  
Issue 0**

**13 DESCRIPTION OF EQUIPMENT**

The MP400\* is a multiple gas detector for a continuous display of gas concentrations, STEL, TWA and Peak values as well as high, low STEL and TWA alarms for ambient air use.

The physical dimensions are 140mm by 84mm by 42mm and the unit weights about 430g. It is a small-size handheld and battery powered gas monitor which is housed in a transparent plastic enclosure (PC), partially covered with soft thermoplastic rubber material (TPE). The front enclosure has one large-size LCD display and two push buttons for users to operate functions and change settings. The detector is also equipped with a metal clip on the back enclosure.

MP400\* is powered by a rechargeable Li-ion battery, and provided with 4 sensor sockets, installed with smart type sensors. All sockets support EC sensor, but only the last sockets (P1, P2) support high power sensors (Catalytic, NDIR and PID). The EC sensors are for toxics and oxygen monitoring of ambient air. Two push buttons are used to operate the unit menu including gas concentration display or alarm settings. The visual alarm comprises multiple LEDs viewed from the top, left side, right side and front of the detector. An imbalanced motor and a buzzer are also built in to produce vibration and audible alerts which cannot be ignored even in a noisy environment. It also incorporates a liquid crystal display.

High power sensors are listed as below:

Type of high power sensors	Type of protection
Baseline PID sensor	Ex ia IIC Ga
Dynamant NDIR sensors	Ex db IIC Gb
Optosense NDIR sensors	Ex ia IIC Ga
SGX catalytic bead sensor for LEL detection	Ex da IIC Ga
mPower catalytic bead sensor for LEL detection	Ex da ia IIC

The MP400\* has no electrical connections while in the hazardous area. It may be charged in the non-hazardous area only: Um = 6.0 Vdc, maximum charging current when using Narada NLP883759LT20 cell is 1900 mA and 2200mA when using E-One ICP103450DA cell.

MP400\* includes four models: MP400 (diffusion version), MP400P (pump version), MP400S (super version) and MP400H (wireless host version). The pump version has an internal sampling pump to push gas to sensor. Wireless version includes a wireless module for data communication.

Product Model Code Definition:

Model Number Code					
MP400	*	Definition	pump	Wireless module	Sensor supported
	Blank	Diffusion model, for MP400D, the suffix D is omitted by default.	No	No	All sensors listed in manufacturer's document number CER80100, Revision 1.
	P	Pump model	Yes	No	All sensors listed in manufacturer's document number CER90100, Revision 1.

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**SCHEDULE**

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**Issue 0**

Model Number Code					
	S	Super model	Yes	Yes, internal Antenna	All sensors listed in manufacturer's document number CER90100, Revision 1
	H	Wireless host model	No	Yes, external Antenna	All sensors listed in manufacturer's document number CER90100, Revision 1.

The products may be distributed by WATCHGAS B.V. Sextantstraat 61 2901 AM Capelle aan den IJssel, NETHERLANDS

**14 DESCRIPTIVE DOCUMENTS**

**14.1 Drawings**

Refer to Certificate Annexe.

**14.2 Associated Sira Reports and Certificate History**

Issue	Date	Report number	Comment
0	26 May 2020	R70207553A	The release of the prime certificate.

**15 SPECIFIC CONDITIONS OF USE** (denoted by X after the certificate number)

15.1 The MP400\* shall only be charged using a charger approved as SELV or Class 2 equipment against IEC 60950 or an equivalent IEC standard. The maximum voltage from the charger shall not exceed 6.0 Vdc.

Likewise, any data download device connected to the MP400\* shall also be approved SELV or Class 2 equipment. The maximum voltage from the device shall not exceed 6.0 Vdc.

15.2 The MP400\* shall only be fitted with mPower battery pack PN: M004-3002-000 or M004-3002-100 or 12.01.09.0003 or 12.01.09.0001.

15.3 Before use, ensure that the ESD film on the display is not damaged or peeling, or the anti-static coating is not damaged.

15.4 The MP400\* shall not be used or be exposed to air with an oxygen concentration of more than 21%.

**16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II** (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

**17 CONDITIONS OF MANUFACTURE**

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

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